

# EMERGENCY PREPAREDNESS AND RESPONSE PLAN

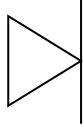
**Project** : High Speed Rail (Green Line) - Package (3) – 660 KM  
(Sokhna - Mattrouh)

**Employer** : The national authority for tunnels - NAT

**Employer Representative** : SYSTRA Group

**Contractor** : JV of Orascom Construction, The Arab Contractors and  
Elsewedy Electric for Power System Projects

00	03 December 2023	HSE Coordinator	Project HSE Manager	Project Director
Rev	Date	Prepared by	Reviewed by	Approved by

**REVISION RECORD SHEET****Note**

- i. Revisions after Rev. 0 are denoted by a vertical line in the left-hand margin against the revised text, with the revision number displayed next to the revision line as shown by the example on the left.

Rev. No.	Date	Description of Revision	Prepared by	Reviewed by	Approved by
00	25 October 2023	Issued for implementation	AT&AM	HK	--

## **CONTENTS**

### **1.0 INTRODUCTION**

#### **1.1 Objectives**

#### **1.2 Scope**

#### **1.3 Abbreviations and Definitions**

### **2.0 RESPONSIBILITIES**

#### **2.1 Site Manager**

#### **2.2 Field HSE Manager**

#### **2.3 ERT Members**

#### **2.4 Subcontractors' Site Management**

#### **2.5 All site personnel**

### **3.0 PROCEDURES**

#### **3.1 Emergency response procedure**

#### **3.2 Contractor's Emergency Control Organization**

#### **3.3 Preventive measures**

#### **3.4 Emergency Management Team**

#### **3.5 Site evacuation**

##### **3.5.1 Evacuation procedure**

##### **3.5.2 Clearance**

##### **3.5.3 Assembly points location**

##### **3.5.4 Emergency communication**

##### **3.5.5 Emergency drill/review**

##### **3.5.6 Response to Events**

##### **3.5.7 Natural disaster preparedness and response**

### **4.0 Appendixes:**

#### **4.1 Appendix No.: 01- Emergency Response Flow Chart**

#### **4.2 Appendix No.: 02 - Emergency Response Cards**

#### **4.3 Appendix No.: 03 - Site Emergency Contact Numbers**

#### **4.4 Appendix No.: 04 - Site Emergency Layout**

## **1.0 Introduction**

**1.1 Emergency Incident:** An unexpected and undesirable event that must be dealt with at once. This may include any kind of event that can result in injury of personnel or equipment or damage to the environment.

## **1.2 Objectives**

This plan is established, implemented and maintained to:

- To define the response to such emergencies in order to minimize the impact on the safety and health of people or the environment.
- To define the arrangements required to ensure readiness for any foreseeable emergency.
- To define the procedure for site evacuations.

## **1.3 Scope**

- This plan is established, implemented and maintained for the site emergency response during the construction and commissioning phases.
- It may be revised as per site requirements, based on the progress of the works and associated emergency scenarios.

## **1.4 Abbreviations and Definitions**

Contractor	– JV of Orascom Construction, The Arab Contractors and Elsewedy Electric for Power System Projects
ERT	– Emergency Response Team (trained team responding to the incident)
HSE	– Health, Safety and Environment
MSDS	– Material Safety Data Sheet
EMT	– Emergency Management Team (representatives of the Contractor responsible for coordinating major or severe incidents requiring external services).
PTW	– Permit To Work

## **2.0 Responsibilities**

### **2.1 Site Manager**

- Make available all required resources and support for implementing this Plan.
- Declare a State of Emergency.
- Act as a Project Emergency Response Manager.

### **2.2 Field HSE Manager**

- Establish and lead the Emergency Response Team (ERT).
- Act as “Location Emergency Coordinator”.
- Regularly review and update the Site Emergency Procedure.
- Inform external emergency services.

### **2.3 ERT Members**

- Inspect the emergency equipment regularly.
- Conduct continuous training sessions for the emergency response plan to all personnel.
- Respond to emergency calls and coordinate the response.

### **2.4 Subcontractors’ Site Management**

- Prepare the Internal Emergency Plan and submit it to the Contractor.
- Appoint personnel acting as an Emergency Coordinator, to aid during evacuations and to perform roll calls.

### **2.5 All site personnel**

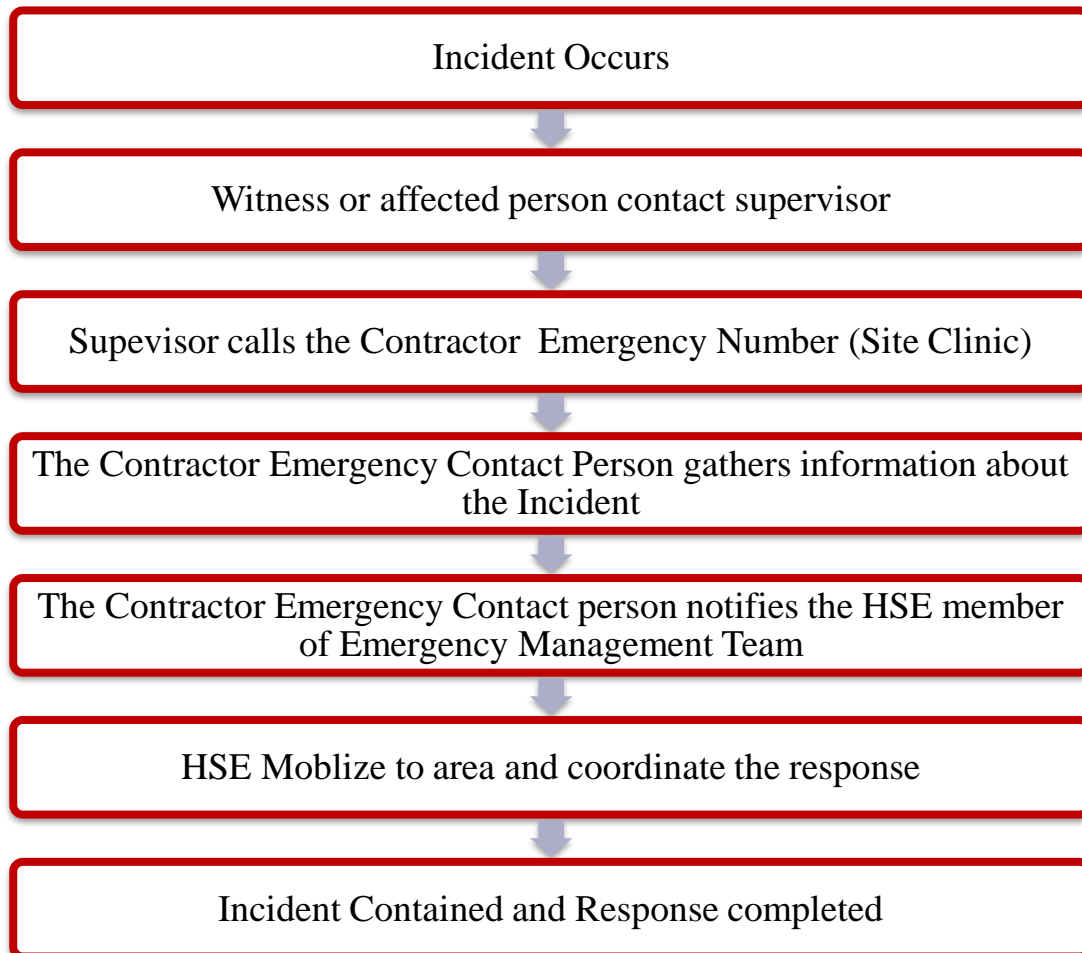
- Notify the supervisor and the Contractor immediately of any situation or incident considered an emergency.
- Immediately evacuate areas adjacent to emergency location and prevent entry of unauthorized personnel.
- Support emergency response measures as directed by the Location Emergency Coordinator, ERT Members and Contractor.

### 3.0 Procedures

#### 3.1 Emergency response procedure

##### General response on Site

1. Inform the supervisor in the first instance of the emergency event.
2. The supervisor is to take immediate action if safe to do so at the accident/incident scene to determine what controls are required to prevent serious injury, damage, fire spread, or spill control and determine if area evacuation is required.
3. The supervisor shall immediately call the Contractor (primary contact Site Clinic as per App.03).
  - a. Give clear concise details.
  - b. Do not hang up until clearance is given.
4. The Contractor (through EMT and ERT) will manage the event and call the appropriate External Emergency Services and Employer if required.
5. The supervisor or deputy shall inform the Contractor's site management of the accident/incident.
6. The emergency response flow chart will be as below:



**Note: Further details are provided in the Emergency Response Cards (App.02) and the Accident Response Procedure (App. 01).**

### 3.2 Subcontractor's Emergency Control Organization

- 3.2.1 Each Subcontractor shall appoint a warden/deputy warden for their areas of responsibility.
- 3.2.2 Each Subcontractor shall ensure that the Accident Response Procedure and Emergency contact details (App.01 & App.03) are displayed at appropriate locations and shall regularly induct all personnel regarding behavior in emergency situations.
- 3.2.3 Each Subcontractor shall submit their internal emergency procedures to the Contractor for approval. These must be commensurate with their scope of works, address foreseeable emergencies arising from their activities, and must align with this document.
- 3.2.4 Each Subcontractor shall forward to the Contractor a list and a copy of the current qualification certificates for all employees with first aid, firefighting training, and other specialist emergency training e.g. height rescue (in accordance with the Project HSE Plan).

### 3.3 Preventive measures

- 3.3.1 To assist in the prevention of accidents/incidents, all Subcontractors shall:
- Ensure that waste is collected in appropriate bins and all waste bins are emptied regularly
  - Ensure that roads, walkways & passageways remain unobstructed from stored materials or any waste. In addition to allocate a safe location for the site assembly point.
  - Ensure that all points of emergency access or egress are clear at all times
  - Ensure that electrical control panels and switchgear remain locked and unobstructed at all times
  - Ensure that all flammable goods and chemicals are stored according to the SDS and in a location approved by the Contractor.
  - Ensure that firefighting equipment is fully operational, inspected, and tested.
  - Ensure that maps are posted at the workplace showing first aid facilities, evacuation routes, fire points, spill kits, and assembly points and these are kept clean and visible.

### 3.4 Emergency Management Team

- 3.4.1 The Emergency Management Team (EMT) will be in charge of initiating the site evacuation and supervising the required emergency response using internal and (if necessary) external resources. It comprises of the following personnel:

3.4.2

Responsibility	Position	Name and phone number
Declare a state of emergency initiate site evacuation information to Owner declare clearance	Site Manager	<b>TBA</b>
Supervise internal emergency response and supervise external emergency response	Filed HSE Manager	<b>TBA</b>
Assistance as per instructions and requirements of the Contractor - HSE Site Management	The Contractor and Contractors' Site Management and HSE staff	<b>Contractor site manager</b> <b>TBA</b> <b>Contractor HSE manager</b> <b>TBA</b>
	Site Security	<b>TBA</b>

3.4.3 All personnel on site are required to follow the instructions given by the EMT without delay to assist in the emergency response. Tasks may include (but are not limited to) directing emergency services, rescue and firefighting, barricading and securing, etc.

### **3.5 Site evacuation**

#### **3.5.1 Evacuation procedure**

- In case the EMT decides to initiate a site evacuation, the Subcontractor at the direction of EMT will inform the JV Managements individually via mobile phone.
- The Subcontractor will report the case to the JV Management & Employer/Engineer via the mobile phone immediately.
- The Subcontractors will in turn inform all site supervisors and other subcontractors working in the same location.
- The response to any alarm will be coordinated by the Subcontractor at the direction of EMT directly assisted by the Subcontractors' Site Management.
- During the evacuation the instructions of the Subcontractor at the direction of EMT have to be followed without delay.
- When the evacuation is initiated, all personnel will go to the designated assembly point from where further instructions will be initiated and coordinated by the subcontractor.
- A roll call will be conducted by all Companies and the result will be communicated to the ERT.
- Search activities for unaccounted personnel will be performed under the direction of EMT only.
- Movement to the assembly points will take place as quickly as can be done in a safe and orderly manner.
- Plant and machinery have to be left switched off in a safe state; keys have to be left in the vehicles.
- In case an assembly point is not reachable safely, an alternative safe point has to be reached and the responsible Company's Site Management informed accordingly.
- Site Security will deny site access to all vehicles (except External Emergency Services) until clearance has been given by the Contractor.
- The subcontractor will update the JV Management / Employer/Consultant with the case status, findings, and the next steps if any.

#### **3.5.2 Clearance**

- Following the return to normal safe conditions the subcontractor will inform the JV Management accordingly.
- In case it is not safe to continue works in certain areas, the clearance details will be given to each Subcontractor by the JV management.

#### **3.5.3 Assembly points location**

- See App.04 for the location of the assembly points.

#### **3.5.4 Emergency communication**

- Primary communication will be established with mobile phones if there is a good phone cell signal.
- The mobile contact telephone numbers shall be updated and kept by the Subcontractor so that they are available whenever required.

- Ensure that all external communication with local emergency services is communicated with the site emergency team.
- Contact details for internal and external emergency services are listed in Appendix 03.

Note: The use of mobile telephones is a temporary measure and will be changed to two-way radios with a dedicated emergency channel once necessary approvals are granted.

### **3.5.5 Emergency drill/review**

- General evacuation drills will be held in all areas. These drills are to demonstrate and improve skills for safe evacuation in the event of an emergency situation occurring, these will be conducted for viable scenarios on the site and have passive observers noting the factual aspects of the drill.
- Following the drill and/or an actual incident a formal review will be undertaken by the Contractor, Subcontractors, and any other involved party to identify the effectiveness of the planned actions, training, equipment, etc. and identify corrective actions if necessary.

### **3.5.6 Response to Events**

- Appendix 01 and Appendix 02 of this document outlines the response to various events on the site.
- These will be reviewed and expanded to reflect the current site activities.

### **3.5.7 Natural disaster preparedness and response**

- In case a warning for a natural disaster and/or potential deterioration of the security situation is being issued by the relevant authorities, the preparation and response to limit the impact on site will be organized as follows:
  1. The Subcontractor will call a meeting with all JV management and invite all required persons (Contractors' Site Manager and responsible key personnel, further parties as required). The meeting will be conducted to define the required actions and measures before, during, and after the natural disaster to be taken in addition to the individual Contractor's Disaster Management Plan.
  2. The defined actions will be implemented by the personnel identified as responsible. All Subcontractors will cooperate and support as required by allocating the necessary manpower and resources. The responsible person will report the completion of the measures taken to the JV Project Management.
  3. The responsible person will report the completion of the measures taken to the Subcontractor Site Management in addition to the JV Project management.
  4. After the disaster, the Subcontractor will assess all site areas and inform the JV Management regarding the required recovery measures. Priority will be given to measures reestablishing the safety and security of the site.
- In case of natural disasters occur without prior warning, the Subcontractor will initiate a Site Evacuation as per Section 4.5. After the event Item 5 of the above list will proceed.
- In the event of a sudden security incident all site personnel are to cease work activities and follow the direction of security personnel.

**4.0 Appendixes:****4.1 Appendix No.: 01- Emergency Response Flow Chart**

<b>Response to Events</b> Behavior in case of accidents at the Site	
<b>Procedure for minor accidents</b>  (no emergency services needed; if in any doubt, refer to procedure for major accidents)	<b>Procedure for major accidents and accidents under unclear conditions</b>  (emergency services/doctor needed, e.g. life-threatening or severe injury/disease, unconsciousness, disorientation, seizure, fracture, amputation, injuries involving hazardous substances or electricity)
1. conduct first aid measures, inform the first aider 2. accompany the injured person to the first aid Clinic or wait for transportation to the hospital (based on the kind of injury)	1. Conduct first aid measures, inform supervisor 2. First responder or supervisor immediately inform the Site First Aid Clinic ( <b>TBA</b> ) AND 3. Inform the Management.
<b>Emergency Call</b> WHO is calling (name and company)? WHERE did it happen? What did happen (nature of accident and injuries)? Are there ADDITIONAL PERSONS threatened (e.g. by hazardous substances, electricity)? WAIT for further questions, explain the means of communication!	
	Organize banksmen to assist emergency services in reaching location of the injured person.
<b>Transportation</b>	
Transport to the first aid Clinic by adequate means, transport to hospital by decision of the Site Nurse.	Transport to the First Aid Clinic, Transport to hospital by decision of the site nurse.

## 4.2 Appendix No.: 02 - Emergency Response Cards

### 4.2.1 Life threatening accident / illness on the Site

Person	Action
<b>On-scene Person</b>	<ul style="list-style-type: none"> <li>• Contact the First Aid Team for help and provide them with the location.</li> <li>• Provide lifesaving first aid.</li> <li>• Assist rescue personnel as needed.</li> <li>• Secure the incident scene / do not disturb accident/incident area</li> </ul>
<b>Site Management</b>	<ul style="list-style-type: none"> <li>• Contact the Emergency Team and notify them of the emergency and assign a person to meet the emergency service at the meeting location.</li> <li>• Contact the HSE lead.</li> <li>• Contact the area Manager once the situation is under control.</li> <li>• Establish an Incident Investigation Committee consisting of Site Managers, HSE Lead and Contractors if appropriate.</li> </ul>
<b>HSE management</b>	<ul style="list-style-type: none"> <li>• Mobilize the Emergency Response Team if rescue is required.</li> <li>• Respond to the incident location and ensure the scene is secured.</li> <li>• Take notes about the incident and begin investigation.</li> <li>• Accompany the injured person to the hospital and wait until an initial diagnosis is completed and results of tests are known.</li> </ul>

### 4.2.2 Fire and Explosion

Person	Action
<b>On-scene Person</b>	<ul style="list-style-type: none"> <li>• <b>Minor fires:</b> Utilize fire extinguisher if qualified and trained</li> <li>• Notify all personnel to evacuate immediately. If personnel are incapacitated, attempt to rescue persons in the area.</li> <li>• Contact Management and HSE using emergency contacts for help and provide incident details.</li> <li>• In case of heavy smoke – attempt to get to the lowest point.</li> <li>• Provide lifesaving first aid in a safe area.</li> <li>• Assist rescue personnel as needed.</li> <li>• When outside keep upwind of the fire. Retreat away from toxic fumes, falling debris and fire and wait for rescue personnel.</li> <li>• Secure the incident scene / do not disturb the accident/incident area.</li> </ul>
<b>Site Management</b>	<ul style="list-style-type: none"> <li>• If external medical/fire-extinguishing help is needed contact emergency services.</li> <li>• Initiate Site Evacuation if required.</li> <li>• Contact the Emergency Teams and notify them of the emergency and assign a person to meet the emergency service at the meeting location.</li> <li>• Gather persons and perform roll call.</li> <li>• Contact the Project manager once the situation is under control.</li> <li>• Establish an Incident Investigation Committee consisting of Manager, HSE, and Contractors if appropriate.</li> </ul>
<b>HSE Management</b>	<ul style="list-style-type: none"> <li>• Mobilize Emergency Response Team.</li> <li>• Respond to the incident location and ensure the scene is secured.</li> <li>• Take notes about the incident and begin the investigation.</li> </ul>

#### 4.2.3 Security Incidents

Person	Action
<b>On-scene Person</b>	<ul style="list-style-type: none"> <li>Assess the situation – risk to people, assets, processes or information?</li> <li>If safe then inform the Management and Site Security of the situation and mitigate the risks.</li> <li>If the situation is not safe then alert the Management and Site Security and relocate to a safe position if possible i.e. the designated assembly point. If you cannot remove yourself safely from the threatening situation then stay calm, cooperate, do not provoke the threat, do not resist, avoid sudden movements, give short and precise answers, avoid eye contact and never pursue any attacker.</li> </ul>
<b>Site Management</b>	<ul style="list-style-type: none"> <li>Implement the Security Plan response</li> <li>Inform the Project Manager</li> </ul>
<b>HSE Management</b>	<ul style="list-style-type: none"> <li>Advice and support</li> </ul>

#### 4.2.4 Electrical Incidents

Person	Action
<b>On-scene Person</b>	<ul style="list-style-type: none"> <li>Switch off the power source, if safe to do so. Do NOT touch the casualty until the power has been switched off.</li> <li>Contact First Aider for help and provide them with the location.</li> <li>Contact the Management and HSE using emergency contacts for help and provide incident details.</li> <li>Initiate lifesaving first aid in a safe area.</li> <li>Continue first aid until emergency responders arrive.</li> <li>Assist rescue personnel as needed.</li> <li>Secure the incident scene / do not disturb the accident/incident area</li> </ul>
<b>Site Management</b>	<ul style="list-style-type: none"> <li>Contact the Emergency Team and notify them of the emergency and assign a person to meet the emergency service at the meeting location.</li> <li>The casualty must be submitted to a medical examination at the hospital, including ECG and urinalysis testing.</li> <li>Contact the Project manager once the situation is under control.</li> <li>Establish an Incident Investigation Committee consisting of Manager, HSE, and Contractors if appropriate.</li> </ul>
<b>HSE Management</b>	<ul style="list-style-type: none"> <li>Respond to the incident location and ensure the scene is secured.</li> <li>Ensure that first aid is immediately provided to the injured person following any electrical incident, regardless of condition.</li> <li>Take notes about the incident and begin an investigation.</li> <li>Accompany the injured person to the hospital and wait until initial diagnosis is completed and the results of ECG/urinalysis testing is known to medical personnel (initial diagnosis).</li> </ul>

#### 4.2.5 **Large spills**

Person	Action
<b>On-scene Person</b>	<ul style="list-style-type: none"> <li>• Contact Management and HSE using emergency contacts for help and provide incident details.</li> <li>• Identify the source and shut off valves, pumps etc. to stop the spill occurring if safe to do so.</li> <li>• Obtain and wear correct personal protective equipment prior to attempting any clean up.</li> <li>• Reduce the impact of the spill and clean up to fullest extent possible by available means – follow the Safety Data Sheet information (e.g. use of spill kit, absorbents etc.)</li> <li>• Make every attempt to prevent contamination to bodies of water</li> <li>• Seal off the area to avoid other employees from exposure.</li> <li>• Assist rescue personnel as needed.</li> <li>• Secure the incident scene.</li> </ul>
<b>Site Management</b>	<ul style="list-style-type: none"> <li>• Contact the Emergency Team and notify them of the emergency and assign a person to meet the emergency service at the meeting location.</li> <li>• Contact the Project Manager.</li> <li>• Establish an Incident Investigation Committee consisting of Manager, HSE and Contractors if appropriate.</li> <li>• Contact environmental authority if needed (Site Manager).</li> </ul>
<b>HSE Management</b>	<ul style="list-style-type: none"> <li>• Mobilize Emergency Response Team and Fire Truck if required.</li> <li>• Respond to the incident location and ensure scene is secured.</li> <li>• Ensure that spilled material and contaminated material is properly contained, labelled and stored in a designated hazardous waste storage facility until final disposal.</li> <li>• Take notes about the incident and begin investigation.</li> </ul>

## 4.3 Appendix No.: 03 - Site Emergency Contact Numbers

Site Emergency Contact Detail أرقام الطوارئ بالمشروع		
Title المنصب	Name الاسم	Phone number رقم التليفون
<b>Internal Contact List:</b>		
Site Manager مدير الموقع	TBA	TBA
Construction Manager مدير الإنشاءات	TBA	TBA
Field HSE Manager مدير السلامة بالموقع	TBA	TBA
Site First Aid Unit وحدة الإسعافات الأولية بالموقع	TBA	TBA
Emergency Response Team Leader قائد فريق الطوارئ	TBA	TBA
Security Support مسؤول الأمن	TBA	TBA
JV Director مدير التحالف	Eng. Sameh Fouad	012 2552 1153
JV HSSE Manager مدير السلامة والامن للتحالف	Hosny Elkady	01050021690
<b>External Contact List:</b>		
Emergency services خدمات الطوارئ	Ambulance الأسعاف	123
	Fire Brigade الأطفاء	180
	Police الشرطة	122
	Hospital المستشفى	TBA
<b>Important phone numbers</b>		
Employer / Engineer Representative مهندس الاستشاري	TBA	TBA
Site Evacuation أخلاء الموقع	Initiation of site evacuation only by the Contractor or emergency services أخلاء الموقع في حالة الطوارئ يحدده مسؤول المقاول او مسؤولي خدمات الطوارئ	

#### 4.4 Appendix No.: 04 - Site Emergency layout

**TBA**